Leadership in the Interactive Age

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These are difficult times! Change is everywhere. The pace is accelerating, propelled by global social, political, economic, technical and demographic forces. These are times about which scientists, sociologists and historians will write books. Our country is in the midst of transition from the last vestiges of the industrial age to the age of interaction -- a special time full of opportunity and challenge. Leaders at all levels must be able to model and encourage the application of ingenuity. Leadership in thriving organizations is a state of mind, not a position.

Leadership and Technology: Is Your Mental Map Ready?

> *When you come to a fork in the road, take it.*
> *Yogi Berra*

> *Knowing ignorance is strength; Ignoring knowledge is sickness.*
> *Lao Tsu*

> *Business has only two basic functions: marketing and innovation. Marketing and innovation produce results. All the rest are costs.*
> *Peter Drucker*

Our models of organizations and of ourselves are out of date. The world has changed around us. The gap between what is and what we perceive has widened to the point of breaking. We must change our mental maps to reflect these changes. And, we must lead our organizations to emulate the new mental maps.

We are at a crossroads and we have a choice. We cannot deny any longer the existence of the need for change. And, we cannot waste our energies any longer fighting against change. We must embrace change and develop our ingenuity and the ingenuity of our organizations. Ingenuity is our intrinsic ability to know ourselves and our talents, become our personal best, and continuously expand and recreate ourselves and our capabilities.

In the industrial age, communication was characterized by the gathering and disseminating of information. This has culminated in what is currently referred to as the information age. The information age, in fact, is a transition period that marks the end of the industrial age and the beginning of the interactive age.

In this transition, our task shifts from the acquiring, hoarding, and communicating of information to conversing with each other, globally, in real time, utilizing past and present

information and applying that information to better discerning our futures and continuously recreating our organizations.

The reorientation of our mental map includes the redefinition of technology and leadership. It is the interaction of ingenuity with leadership and technology that is the accelerator of innovation, the necessary bottom line for all organizations.

Personal Ingenuity and Emerging Technologies

> *He that invents a machine augments the power of a man and the well being of mankind.*
> *Henry Ward Beecher*

> *We are engaged in a search for meaning, purpose, truth, love, compassion, self-worth, wisdom, and unity -- and the means to express them.*
> *Herman Bryant Maynard Jr.*
> *Susan E. Mehrtens*

Technology has propelled our evolution for thousands of years at a steadily increasing rate as we seek to expand the mental maps of our existence. Technology is a reflection of our ingenuity and supports us in the development and application of our ingenuity. Technology helps us to know, to be, and to create.

Technology shapes the nature of work. Technology is ending the concept of jobs while expanding the character of work. In the interactive age, technology will be re-integrated into the fabric of our lives in a new way as we seek a balance of knowing, being, and creating.

Technology casts a long shadow. The technologies important for the next ten years have surfaced. The race has already begun. To gain personal competitive advantage, you must be aware of these emerging technologies, understand them, and be able to apply them to help solve problems and advance your capabilities.

Technology exists in three forms -- direct, supportive and enabling. Direct technologies are those integrated into the product or service. Supportive technologies are those that are involved in the research, development, manufacture or distribution of the product or service. Enabling technologies provide advancement in either direct or supportive technologies. As an example, the computer and telecommunication technologies can be direct, supportive, and enabling.

Knowledge and the Ethics of Technology

> *Knowledge is proud that he has learned so much; Wisdom is humble that he knows no more.*
> *William Cowper*

> *Informania erodes our capacity for significance... We collect fragments. We get into the habit of clinging to knowledge bits and lose our feel for the wisdom behind knowledge.*

Michael Heim

As we acquire more knowledge, things do not become more comprehensible but more mysterious.

Albert Einstein

As we move into the interactive age, knowledge grows in geometric proportion to our interaction, on a global level, with technology and with each other. Such interaction provides unlimited access to that information and, in turn, unlimited choices. However, all knowledge is subject to change as fast as the technology changes. While access to information is unlimited, then, any permanent knowledge, in itself, is limited by its continual obsolescence in the face of continual change. Viewed as an instrument of growth and evolution, technology provides us with the progressive ability to respond to change, to become the best we can be, and to be a force for the advancement of society. While the industrial age focused on matching specific skills to job descriptions, the interactive age focuses on work.

In the age of interaction, we are challenged to continually redefine our talents and to face the ongoing task of preparing ourselves to expand our perceptions of our purpose and our capacity to do our work. In short, we need to continually comprehend our place in the scheme of things and prepare ourselves to be effective in a variety of possible settings. Technology has forced the ethical question upon us: "What are we here for?" Our ingenuity provides us with the tools to answer the question: "We are here to expand our capacity, to be all we can be, to do our work, and to serve our unfolding purpose in the course of human history."

Integrating Technologies In the Age of Interaction

The sum total of all human knowledge amassed throughout history is only one percent of the information that will be available to us by 2050.

Marvin Cetron

Owen Davies

The more diverse the civilization, the more differentiated its technology, energy forms and people, the more information must flow between its constituent parts if the entirety is to hold together particularly under the stress of high change.

Alvin Toffler

The next wave of economic growth is going to come from knowledge -- based businesses.

Stan Davis

Jim Botkin

The way we work has forever changed. Computers, communications, and related software technologies have created a cyberspace in which we all operate. These information technologies, packaged in useful forms, have become a powerful new personal teammate. They can compress both time and space. Making full use of the information technologies enables us to traverse the information highway at electronic speeds interacting with others to facilitate teamwork and improve creativity.

We can become time travelers reaching back into the past to understand the patterns of historical development that shed light on the present. And, we can use these technologies to help us perceive the potential futures that await us.

Information technologies also redefine teams and teamwork. Teammates do not have to all be at the same place at the same time. Members of the team can be spread over the globe and interaction can occur asynchronously. Or, teams can become the dominant form of work, as in Japan, where software factories have totally integrated information technologies into the workplace.

Information technologies can facilitate teamwork by breaking down the communication barriers that exist whenever people get together. Soon, these technologies will even make interaction possible in different languages. Groupware, software for teams, can improve the creativity of teams.

Leading in the Age of Interaction -- Tools That Recreate

> *No one is great enough or wise enough for any of us to surrender our destiny to.*
> *The only way in which anyone can lead us is to restore the belief in our own guidance.*
> *Henry Miller*

> *If the sage would guide the people, he must serve with humility.*
> *If he would lead them, he must follow behind.*
> *Lao Tsu*

> *The most important trait of a good leader is knowing who you are.*
> *Edward McCracken, CEO Silicon Graphics*

As we move from the industrial age to the interactive age, the focus of leading shifts from the player to the playing field; and the playing field will be designed for team play. Leading will be defined by commitment rather than charisma, by ingenuity rather than authority, and by conversation rather than connections.

The role of a leader in the interactive age will include using the tools of ingenuity and technology to decompartmentalize organizations, their people, their markets, and their services. Leading in an environment of ongoing change will require synthesizing knowledge, vision, and creativity in order to continually recreate teams and organizations and position them to anticipate, initiate, and respond to change.

Motivation will determine the ability to lead, as will the ability to integrate lifelong learning and flexibility into your personal and professional goals. Expectations of job security, linear promotions, pensions, and retirement are expectations that bond potential leaders to the strategies and systems of the industrial age and block their readiness to respond effectively to change and to lead.

The new voices of leaders in the interactive age call for knowing who you are, being and becoming all you can be, and continuously and creatively interacting with your environment. You will be hearing from some of today's interactive leaders.

Leadership Is a State of Mind, Not a Position

> *The old management paradigm has run out of steam. When you're at the end of your rope, introspection becomes particularly important. The ability to live in the question, rather than drive for the answer, helps keep the antenna up and the eyes open.*
> *Richard Pascale*

> *At first it's hard to persuade leaders to let go of control.*
> *Erika Anderson*

> *We in our own age are faced with a strange paradox. Never before have we had so much information in bits and pieces loaded upon us by radio and television and satellite, yet never before have we had so little inner certainty about our own being.*
> *Rollo May*

In the interactive age, leaders in organizations will emerge from any position within and without the organization. The common characteristic of leadership will be ingenuity.

Interactive leaders will be able to motivate by ennobling, enabling, empowering, and encouraging. They will be able to establish a shared vision, mission, goals and values in organizations.

Interactive leaders will be able to discern the difference between intrinsic and extrinsic values. They will be able to guide the organization towards those intrinsic values that will facilitate the organization's discovery and realization of its purpose.

Interactive leaders will see themselves as members of a team, viewing both technology and colleagues as teammates. They will be open to possibilities different from and, possibly, exceeding their expectations, and they will be able to continuously evaluate and change their perceptions of their purpose within an organization.

The new leaders will live life responsively, open to interaction, available and responsible to their own lives, to others, and to their environment. They will perceive the resources of life as abundant, and they will have the capacity to risk intimacy, to share knowledge, and to build community both internally and externally.

Interactive leaders will continually rediscover who they are and integrate learning, work, and play throughout their lives, as they discern and fulfill their purpose.

Leadership, Ingenuity, and Technology Interaction: Accelerators of Innovation

> *To meet the demands of the fast -- changing competitive scene, we must simply learn to love change as we have hated it in the past.*
> *Tom Peters*

> *Innovation is the specific tool of entrepreneurs, the means by which they exploit change as an opportunity for a different business or a different service.*
> *Peter Drucker*

> *My sensations resembled those one has after climbing a mountain in a mist*
> *when on reaching the summit the mist suddenly clears and the country becomes*
> *visible for forty miles in every direction.*
> *Bertrand Russell*

Innovation is the only real function of organizations. Change, the one constant in our lives, is the driver of innovation. In today's environment, it is innovate or die!

The challenge for today's leaders is to help organizations learn to innovate. This will require the ingenuity of everyone in the organization, not just a select few. Interactive leaders will know how to innovate: seek change, gain the vantage point, motivate freedom, and delight customers. Interactive leaders understand and utilize the power of technology to help the organization delight its customers, stakeholders, and employees; gain competitive advantage; and realize its purpose. Leadership employs ingenuity to perceive changes in the organization's market. Ingenuity enables the perception of the opportunities in the market caused by the interaction of the customer's needs, technological capability, and competitive response, all embedded in an environment of social, political, economic, demographic, and technical driving forces for change. Establishing a strategy that sails on the winds of market change and fulfills the organization's purpose requires ingenious leaders.

Delighting customers can happen only if the leaders can perceive their unarticulated needs and deliver products and services to meet those needs in a timely manner.

Organizations and Individuals that Have Invented New Tools for New Times

> *The responsibility for change lies with us.*
> *Alvin Tofler*

> *In the old paradigm it was believed that in any complex system the dynamics of*
> *the whole could be understood from the properties of the parts. In the new*
> *paradigm, the relationship between the parts and the whole are reversed. The*
> *properties of the parts can be understood only from the dynamics of the whole.*
> *Fritjof Capra*

> *To see a World in a grain of sand,*
> *And Heaven in a wild flower,*
> *Hold Infinity in the palm of your hand,*
> *And Eternity in an hour.*
> *William Blake*

Technology and globalization have brought us and our organizations to a crossroads. The information age is the transitional period from the industrial age to the interactive age. The interactive age will be characterized by our ability to converse with each other, globally, in real time, connect rapidly with our past, and better discern our future. The environment in which we and our organizations must work is now radically different from what it was when our organizations were created. New times require new perspectives and new tools.

Ingenuity is our innate ability to adapt to, and even anticipate, the changes in our environment. Ingenuity allows us to develop new tools and new perspectives, make the most of the resources we have to create our future.

Ingenuity constitutes our intrinsic ability to be leaders: to know ourselves and our organizations; to motivate others by ennobling, enabling, empowering and encouraging; to establish a shared vision, mission, goals and values.

Teamed with technology, ingenuity points us to the inevitable opportunities in technological development and provides us with the perspective of leadership from any position within or without an organization.

A five year plan for the next century begins with an assessment of motivations and goals and includes a plan for a change, a course of action, and ongoing evaluation.

Voices of Today's Interactive Leaders

The following leaders participated in the development of these concepts:

Joseph Andreana - GTE
James Autry - Consultant, Author, Poet
Lon Badgett - Leadership Advantage
Dr. Barry V. Bales - LBJ School of Public Affairs, UT
Heinrich Bantli - 3M
Barbara Benjamin - Intuitive Discovery
Federico Brown -Internet Interactive Marketing
Dr. Jan Brown - Consultant
Constance Bruno - Right Associates
Roseanne Cahn - CS First Boston
Dr. Nora Comstock - Consultant
Pat Conroy - Micromain Technologies
Terry Day - Exxon USA
Sandy Dochen - Austin Chamber of Commerce
Paul Duffley - PepsiCo
Ron Edelstein - Gas Research Institute
Gary Epple - DAZEL, Inc.
Milton Fisher - Author
Richard D. Grant - Psychologist
Fr. Joseph F. Girzone - Author
Alan Graham - The Trilogy Group
Taffy Holliday - River Run Software
Don Honicky - Perspectives International
Alfred Iannone - UT Austin School of Engineering
Dr. Allen Johnson - RAS Group
Dr. Shirley Kenny - Pres., SUNY Stony Brook
Chad Kissinger - Onramp Access
Steven Laden - Southern Union Gas
Dr. Trilok Manocha - River Run Software
William Miller - Global Creativity Corp.
Eric Paul - Motorola
Dr. Derek Ransley - Chevron
Dave Monson - Sterling Health Services
Dr. Rich Newell -3M
Gayle Ramey - Excelsys, Inc.
Tina Rohrer - Artist
Anne D. Robinson - Creativity, Communication, Common Sense
Dr. Arnie Schaffer - Phillips Petroleum
Jim Sciarrino - Siemens Rolm
Virginia Silver - International Paper

Ralph Smucker - Business Counseling Services
David P. Snyder - Snyder Family Enterprise
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